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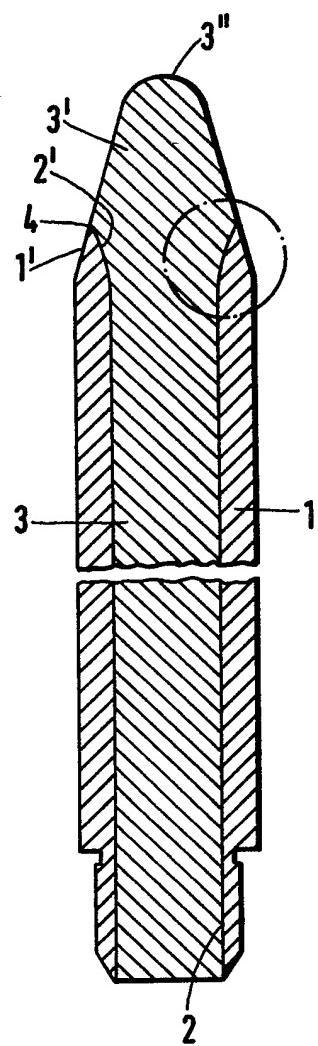
(54) **Pencil, primarily a cosmetic pencil**

(57) The invention relates to a pencil, primarily a cosmetic pencil, which is made by a filling composition being poured into the hollow space of a pencil shank. To ensure that, during pouring, air inclusions do not arise between the pouring mould and the filling in the region of the point of the filling which projects out of the shank, it is proposed that the hollow space of the pencil shank should widen, at the end adjacent to the point of the filling, towards that end.

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SPECIFICATION

Pencil, primarily a cosmetic pencil

5 The invention, relates to a pencil, in particular but not exclusively a cosmetic pencil, with a filling which is held within the hollow space of a pencil shank made of a sharpenable material. The pencil shank can be processed by cutting and the filling is
 10 enclosed fixedly within the pencil shank and is made by pouring a filling composition into the hollow space and forming an exposed point of the filling. A pencil of this type is described in the laid open Specification of German Patent Application No.
 15 2,718,957.
 - In the manufacture of such a known pencil, air inclusions can arise under certain circumstances between the point of the filling and the pouring mould, during the pouring process. The inclusions
 20 are likely to occur at the transition from the pencil shank to the point of the filling as a result of the blunt formation of the front end of the shank which is in the form of a truncated cone. These air inclusions impair the appearance of the surface of the point of
 25 the filling and, consequently, of the pencil as a whole. If, to prevent such air inclusions, the wall of the shank were made thinner at the front end where the point extends, so that it ended in an edge, but at the same time the continuously cylindrical hollow
 30 space of the shank were retained, a weakening of shank would arise at this end. As a result, the shank would be very susceptible to mechanical stresses and it could easily be broken outwards or broken off.
 The aim of this invention is to provide a more appropriate design in the region of the point of the pencil, so that these problems are reduced.
 According to the present invention there is provided a pencil such as a cosmetic pencil comprising a filling enclosed and held in a hollow space of a
 40 shank, the shank being made of a sharpenable material and the filling being produced by pouring a filling composition into the hollow space and forming an exposed point of the filling, wherein the hollow space of the shank widens towards the end adjacent
 45 to the exposed point of the filling.
 With the invention, the end of the hollow space of the shank of the pencil which receives the filling composition widens towards the exposed point of the filling. Thus, the radial thickness of the end face
 50 of the front end of the shank can be greatly reduced or, in a preferred embodiment of the invention, can even diminish to nothing, by providing an edge-shaped design for the front end of the shank. As a result, the cause of the occurrence of air inclusions
 55 between the poured composition of the filling and the pouring mould can be removed.
 The invention is particularly useful where the outer face of the end of the shank near the point of the filling has a conical contour. As a result of the
 60 internal widening of the end of the hollow space of the shank, the inner face of the shank in that region can converge towards the outer face, so that a significantly larger angle arises at the edge at which the two faces meet one another than in cases where the
 65 inner face of the front end of the shank is made

cylindrical. Because of this larger angle, the end of the shank also acquires a greater strength.

An additional advantage of the invention is that the shapes of the end of the shank and of the point of the filling lead to a more reliable removal of the pencil from the mould after the filling has been poured. Because of the widening of the inner face of the shank, a substantially larger angle can be formed within the filling between its faces within and outside the shank. These faces meet at an edge where the filling emerges from the shank and the outer face of the filling has a discontinuity. In contrast, in the manufacture of the known pencil, a rectangular shoulder arises at the point where the filling
 70 emerges from the shank because filling composition flows round the end face of the shank which is in the form of a truncated cone. Because of this larger internal angle in the filling, the point of the filling acquires a greater strength at the point where it
 75 emerges from the shank so that the danger that, when the pencil is removed from the mould, the filling cracks or tears at this point is, at the very least, reduced. Preferably, also, to provide a similar effect, the widening of the hollow space of the shank at the
 80 end of the shank is bell-shaped and thus the transition from the cylindrical region to the widened region of the hollow space is continuous. Moreover, in the present invention, all the measures of published German Application No. 2,718,957 can be employed,
 85 insofar as these are in accordance with the present invention. This applies, for example, to a dome-shaped design for the tip of the point of the filling, and also to the materials which can be processed by cutting for example, wood or plastics of which the
 90 end of the shank consists.
 The invention will be more clearly understood from the following description which is given by way of example only with reference to the accompanying drawing, in which the sole Figure is a longitudinal
 95 section of a pencil of the invention.
 A filling 3 is poured into a hollow space 2 of a shank 1, forming an exposed point 3' of the filling which is provided, at its end, with a dome-shaped rounded tip 3''. In the region of the front end of the
 100 shank, the hollow space 2 is provided with a smooth bell-shaped widening 2'. The inner face of the shank at this widening meets the conical outer face 1' of the front end of the shank at an edge 4. The angle enclosed at the edge 4 by the faces 1' and 2' is not
 105 ably larger it would be if the cylindrical wall of the hollow space 2 were to extend right to the end of the shank. The drawing, in which the region of the pencil formation to which the invention arises lies within the circle marked with a dot-and-dash line, also
 110 shows that the angle within the filling at the point at which the filling emerges from the front end of the shank is clearly more than 90° and is therefore larger than if a shoulder were to be formed on the outer side of the filling as a result of the end of the shank
 115 having the shape of a truncated cone with a flat end. In that event, the filling would flow over the flat end, and would include a sharp angle and thus a region of weakness due to stress concentration. At the rearward end, the shank 1 is reduced in its outer cross-
 120 section for the purpose of allowing a closing or
 125

decorative cap to be attached.

CLAIMS

1. A pencil such as a cosmetic pencil comprising a filling enclosed and held in a hollow space of a shank, the shank being made of a sharpenable material and the filling being produced by pouring a filling composition into the hollow space and forming an exposed point of the filling, wherein the hollow space of the shank widens towards the end adjacent to the exposed point of the filling.
2. A pencil according to claim 1, wherein the widening is bell-shaped.
3. A pencil according to claim 1 or 2, wherein the outer face of the front end of the shank is conical.
4. A pencil according to claim 1, 2 or 3, wherein the outer face and the widening inner face of the front end of the shank meet in an edge.
5. A pencil according to any preceding claim, wherein the exposed point of the filling is conical.
6. A pencil according to any preceding claim, wherein the end of the exposed point of the filling is rounded.
7. A pencil, such as cosmetic pencil, substantially as hereinbefore described with reference to and as illustrated in the accompanying drawing.

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